ABSTRACT

Hydraulic systems for controlling movement of an apron and a bucket of earth moving apparatuses are disclosed. The hydraulic system includes a hydraulic fluid supply, a hydraulic cylinder for moving the apron, a hydraulic cylinder for moving the bucket and a valve for controlling flow of hydraulic fluid to the hydraulic cylinders. The hydraulic system includes another valve for controlling the flow of hydraulic fluid to the hydraulic cylinders. An earth moving apparatus having a bucket and an apron configured with the hydraulic system is also disclosed. Methods for controlling movement of the bucket and the apron are also disclosed. An earth moving apparatus having an ejector wall for removing soil from the bucket is described. A linkage means for reducing the force required to move the ejector wall is incorporated in the earth moving apparatus. A substantially, vertical oriented hydraulic cylinder for moving the ejector wall is also described.

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